

REMARKS / ARGUMENTS

I. General Remarks and Disposition of the Claims

Applicants respectfully request that the Examiner reconsider the application in view of the following remarks.

In this Response, claims 1-3, 5-18, and 60-62 are pending. Claims 1 and 5 were amended previously. Claim 4 was cancelled previously. Claims 19-59 were cancelled previously in response to a restriction requirement.

II. Claim Rejections Under 35 U.S.C. § 112

The Examiner has rejected claims 1-3, 6-18, and 63 under 35 U.S.C. § 112, first paragraph, stating: "The limitation of a particle size greater than 300 microns is not supported by the specification and claims as originally filed and therefore constitute new matter." (Office Action at 2.) Applicants respectfully traverse.

"To satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention." *Manual of Patent Examining Procedure* § 2163(I) (2004) (hereinafter "MPEP"). "The examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the original disclosure a description of the invention defined by the claims." MPEP § 2163(II)(A)(3)(b). Merely arguing lack of literal support in the disclosure is not sufficient to satisfy the Examiner's burden. *See In re Wertheim*, 541 F.2d 257, 265 (CCPA 1976) ("The PTO has done nothing more than argue lack of literal support, which is not enough."). Accordingly, the Examiner has not met this burden.

The Examiner has not met the burden of providing why a person of ordinary skill in the art would not recognize in Applicants disclosure a description of "an average particle size greater than 300 μm ." With respect to particle size, Applicants' specification recites:

The degradable particles generally should have a particle size that is suitable for use in jetting tools that may be used in the methods of the present invention. In an exemplary embodiment, the degradable particles should have an average particle size in the range of from about 400 mesh to about 8 mesh. In other exemplary embodiments, the degradable particles should have an

average particle size in the range of from about 100 mesh to about 40 mesh.

(Application ¶ 0020.) A size of 400 mesh corresponds to 37 microns; a size of 8 mesh corresponds to 2.38 millimeters.¹ Accordingly, Applicants' specification describes the particle size of suitable degradable particles with sufficient detail for one of ordinary skill to recognize that the recitation in Applicants' claims of "an average particle size greater than 300 μm " is supported by the specification.

The Examiner's only support for this rejection is that "[t]he limitations of a particle size greater than 300 microns is not supported by the specification and claims as originally filed." (Office Action at 2.) However, merely arguing lack of literal support in the disclosure is not sufficient to satisfy the Examiner's burden. *See In re Wertheim*, 541 F.2d at 257. The claimed invention does not have to be described word for word in order to satisfy the written description requirement of § 112. *Id.* "The burden of showing that the claimed invention is not described in the specification rests on the PTO in the first instance, and it is up to the PTO to give reasons why a description not in *ipsis verbis* is insufficient." *Id.* Accordingly, the Examiner's mere statement that there is not literal support for the claimed range is insufficient to support this § 112 rejection for failure to comply with the written description requirement.

Furthermore, the Federal Circuit, in *Ralston Purina Company v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 1575-77 (Fed. Cir. 1985), affirmed a district court's finding that an open ended range was supported by a written description disclosing only a specific range. The Federal Circuit stated:

With respect to protein content, Far-Mar-Co argues that the claim language "protein content of at least about that of solvent extracted soybean meal" is not supported by the language of the parent application, which speaks of "soybean meal having a low fat and high protein content." The parent application also states that "[s]uch 50% protein soybean meal is well known and frequently is a by-product of the process of oil extraction from soybeans. Such meal is preferably solvent extracted to decrease the fat content thereof to the range mentioned above." Further, "[s]oybean meal having a protein content of approximately 50% is the preferred meal component for use in the present invention. When, however,

¹ See *Particle Size Conversion*, Sigma Aldrich Co., at http://www.sigmaaldrich.com/Area_of_Interest/Laboratory_Essentials/LabBasics/Key_Resources/Technical_Library/Particle_Size_Conversion.html (last visited Dec. 6, 2005).

the meal has a protein content of substantially less than 50%, it may be mixed with a high protein component which will increase the protein content of the combination to the preferred 50%. The trial court found that the parent disclosure does support the claim language, based on the 1964 disclosure and on consideration of the knowledge possessed by those skilled in the art of extrusion of . . . vegetable materials in 1964. . . . Having considered Far-Mar-Co's arguments, we conclude that the court did not clearly err in determining that the parent's disclosure adequately supports the protein content of the claims in issue.

See Ralston Purina, 772 F.2d at 1575-76. Accordingly, Applicants' specification supports the recitation of "an average particle size greater than 300 μm " in Applicant's claims.

For the foregoing reasons, the Examiner has not met the initial burden of presenting evidence or reasoning to support the § 112 rejection. Accordingly, Applicants respectfully request the withdrawal of these § 112 rejections with respect to claims 1-3, 6-18, and 63 and further request the timely issuance of a Notice of Allowance for these claims.

III. Claim Rejections Under 35 U.S.C. § 102(b)

A. Claims 1-3, 5, 14, and 60-62 Are Not Anticipated by *Matsumoto*

The Examiner has rejected claims 1-3, 5, 14, and 60-62 under 35 U.S.C. § 102(b) as anticipated by *Matsumoto* (U.S. Pat. No. 4,575,396). (Office Action at 2.) Applicants respectfully traverse.

With respect to *Matsumoto*, the Examiner has stated:

Matsumoto teaches a method of wet blasting a surface with blasting media in order to clean the surface. In col. 3, lines 5-10, *Matsumoto* teaches blasting media comprising particles having a diameters of less than 0.5mm, which is equivalent to 500 microns. In col. 6, lines 20-25, *Matsumoto* teaches jetting the blasting media with water and compressed air against the object to be cleaned. In reference to claims 2-3, refer to col. 6, lines 20-25. In reference to claim 5, refer to col. 4, lines 27-29. In reference to claim 14, the limitations are inherently met since *Matsumoto* teaches a particle size of less than 500 microns. In reference to claims 61-62, refer to col. 4, lines 25-29 and col. 3, lines 3-5.

(Office Action at 2-3.) Applicants respectfully disagree because *Matsumoto* does not teach every element recited in the claims 1-3, 5, 14, and 60-62 as required to anticipate these claims under 35 U.S.C. § 102(b). MPEP § 2131.

In particular, *Matsumoto* does not disclose “a cleaning fluid comprising . . . degradable particles” as recited by Applicants’ independent claims 1 and 60. Degradable particles are “capable of undergoing an irreversible degradation during or after use;” and once degraded, the degradable particles “should not naturally, or *sua sponte* recrystallize, reconstitute, or resolidify.” (Application ¶ 0012.) In contrast, *Matsumoto* discloses “hard particles of a plastics resin . . . such as polyacetyl or polycarbonate, with one or more glass beads being embedded within and surrounded by the resin.” *Matsumoto*, col. 3, ll. 7-12. “Preferred resins for forming the mass 12 are polycarbonate, polyacetyl and polyester.” *Matsumoto*, col. 4, ll. 27-28. Nowhere does *Matsumoto* teach or suggest that the disclosed hard particles are degradable, as recited in Applicants’ independent claims.

For at least these reasons, Applicants’ independent claims 1 and 60 are not anticipated by *Matsumoto* because *Matsumoto* does not teach every element of the invention as required by MPEP § 2131. Claims 2-3, 5, and 14 depend either directly or indirectly from independent claim 1, and claims 61-62 depend either directly or indirectly from independent claim 60. All these dependent claims, which include all the limitations of claim 1 or 60, are allowable for at least the reasons cited above with respect to independent claims 1 and 60. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 1-3, 5, 14, and 60-62 and further request the timely issuance of a Notice of Allowance for these claims.

B. Claims 1-3, 10-16, and 18 Are Not Anticipated by *Yam*

The Examiner has rejected claims 1-3, 10-16, and 18 under 35 U.S.C. § 102(b) as anticipated by *Yam* (U.S. Pat. No. 4,575,396). (Office Action at 3.) Applicants respectfully traverse.

With respect to *Yam*, the Examiner has stated:

Yam et al. teach a method of cleaning electronic hardware by lasting with an abrasive media comprising a water soluble alkaline salt of bicarbonate and carbonate. *Yam* teaches particle sizes no larger than about 300 microns in diameter (Abstract). The limitations of greater than 300 microns reads on the teachings of *Yam* since “about 300 microns” can include values greater than 300 microns” (i.e. 301-303microns). In reference to claims 2-3, refer to col. 5, lines 10-13. In reference to claims 10-13, the limitations are met since *Yam* teaches a bicarbonate salt. In

reference to claim 14, refer to col. 7, lines 28-47. In reference to claim 15, refer to col. 5, lines 30-35. In reference to claim 16, refer to col. 5, lines 55-62. In reference to claim 18, refer to col. 5, lines 30-35.

(Office Action at 3.) Applicants respectfully disagree because *Yam* does not teach every element recited in the claims 1-3, 10-16, and 18 as required to anticipate these claims under 35 U.S.C. § 102(b). MPEP § 2131.

Applicants' independent claim 1 recites that "the degradable particles have an average particle size greater than 300 μm ." Rather than disclosing this recitation, *Yam* discloses "an average particle size of at least about 20 microns but not more than about 300 microns [p]articles larger than about 300 microns are preferably not employed because such particles can damage the electronic hardware components being blast cleaned." *Yam*, col. 7, ll. 13-20. "In order to anticipate the claims, the claimed subject matter must be disclosed with 'sufficient specificity to constitute anticipation under the statute.'" MPEP § 2131.03. *Yam*'s particles have a particle size not more than about 300 microns, and nowhere does *Yam* disclose a particle having an average particle size greater than about 300 microns. *Yam* only specifically discloses particles that are much smaller than 300 microns. For example, *Yam* teaches that the preferred average particle size is from about 50 to about 150 microns. *Yam*, col. 7, ll. 27-28. And the largest mesh size disclosed by *Yam* is a 140 mesh screen, which corresponds to 105 microns. *Yam*, col. 7, ll. 31-35. Accordingly, *Yam* does not disclose an average particle size greater than 300 microns with sufficient specificity as required to anticipate Applicants' independent claim 1.

For at least these reasons, Applicants' independent claim 1 is not anticipated by *Yam* because *Yam* does not teach every element of the invention as required by the MPEP § 2131. Claims 2-3, 10-16, and 18 depend either directly or indirectly from independent claim 1. All these dependent claims, which include all the limitations of claim 1, are allowable for at least the reasons cited above with respect to independent claim 1. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claims 1-3, 10-16, and 18 and further request the timely issuance of a Notice of Allowance for these claims.

C. Claims 1-3 and 6-14 Are Not Anticipated by *Roelofs*

The Examiner has rejected claims 1-3 and 6-14 under 35 U.S.C. § 102(b) as anticipated by *Roelofs* (U.S. Pat. No. 4,575,396). (Office Action at 3.) Applicants respectfully traverse.

With respect to *Roelofs*, the Examiner has stated:

Roelofs teaches a method of cleaning the interior surfaces of a fluid delivery system by blasting with an abrasive particle in a liquid carrier. In col. 6, lines 1-65, *Roelofs* teaches particle sizes ranging from 5-500 microns. In reference to claims 2-3 refer to col. 6, lines 53-55. In reference to claims 6-7 and 10-13, refer to col. 6, lines 30-39 which teach abrasive particles comprising starch, boric acid, calcium borate, zinc borate, and sodium bicarbonate. In reference to claims 8-9, refer to col. 6, lines 53-67. In reference to claim 14, the limitations are inherently met since *Roelofs* teaches the claimed particle size.

(Office Action at 3-4.) Applicants respectfully disagree because *Roelofs* does not teach every element recited in the claims 1-3 and 6-14 as required to anticipate these claims under 35 U.S.C. § 102(b). MPEP § 2131.

Applicants' independent claim 1 recites "jetting against a surface to be cleaned, a cleaning fluid." In contrast, *Roelofs* does not teach jetting. Instead, *Roelofs* teaches "cleaning interior surfaces of fluid delivery systems" by "passing through the system an abrasive cleaner composition." *Roelofs*, col. 3, ll. 12-15. With respect to the flow of the abrasive clean composition, *Roelofs* discloses that "the flow of the abrasive cleaner or abrasive containing cleaner composition should be sufficient to inhibit the settling of abrasive particles and to assure at least some turbulence to cause the particles to rub against the internal surfaces of the fluid delivery system." *Roelofs*, col. 5, ll. 64-col. 6, ll. 1 (emphasis added). Accordingly, *Roelofs* does not teach "jetting against a surface to be cleaned, a cleaning fluid" as recited in Applicants' independent claim 1.

For at least these reasons, Applicants' independent claim 1 is not anticipated by *Roelofs* because *Roelofs* does not teach every element of the invention as required by the MPEP § 2131. Claims 2-3 and 6-14 depend either directly or indirectly from independent claim 1. All these dependent claims, which include all the limitations of claim 1, are allowable for at least the reasons cited above with respect to independent claim 1. Accordingly, Applicants respectfully

request withdrawal of this rejection with respect to claims 1-3 and 6-14 and further request the timely issuance of a Notice of Allowance for these claims.

IV. Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claim 17 under 35 U.S.C. § 103(a) as obvious in view of *Roelofs* in combination with *Houghton* (EP 0510762). (Office Action at 5.) Applicants respectfully traverse.

With respect to the *Roelofs-Houghton* combination, the Examiner has stated:

Roelofs fails to teach the limitations of claim 17. Houghton teaches a cleaning composition comprising abrasive particles, such as perborate compounds. On page 8, lines 50-65, Houghton teaches that the cleaning compositions include conventional adjuvants such as corrosion inhibitors. It would have been obvious to a person of ordinary skill in the art to modify the methods of Roelofs to include adjuvants, such as corrosion inhibitors, as taught by Houghton, which are conventionally used in the cleaning compositions.

(Office Action at 5.) Applicants respectfully disagree because the Examiner has not established a *prima facie* case of obviousness because the *Roelofs-Houghton* combination does not teach each limitation of claim 17 as required to obviate this claim. MPEP § 2142.

In particular, the *Roelofs-Houghton* combination does not teach or suggest the step of “jetting against a surface to be cleaned, a cleaning fluid” as recited in Applicants independent claims 1, from which claim 17 depends. As discussed above with respect to the § 102(b) rejection, *Roelofs* does not teach this recitation. Nor can *Houghton* be used to supply this missing recitation. The Examiner relies on *Houghton* for the teaching that “the cleaning compositions include convention adjuvants such as corrosion inhibitors.” (Office Action at 5.) Accordingly, the *Roelofs-Houghton* combination does not teach each element of independent claim 1 and thus cannot be used to obviate this claim. “If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious.” See MPEP § 2143.03. Accordingly, Applicants respectfully request withdrawal of this rejection with respect to claim 17 because the Examiner has failed to establish a *prima facie* case of obviousness as required by MPEP § 2142. Applicants further request the timely issuance of a Notice of Allowance for claim 17.

SUMMARY

In light of the above remarks, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections. Applicants further submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments, or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants believe that there are no fees due in association with this filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicants respectfully request that the Commissioner accept this as a Petition Therefor, and direct that any additional fees be charged to Halliburton Energy Services, Inc. Deposit Account No. 08-0300.

Respectfully submitted,

By: 

Robert A. Kent
Reg. No. 28,626
Halliburton Energy Services, Inc.
2600 South Second Street
P.O. Drawer 1431
Duncan, OK 73536-0440
Houston, Texas 77002-4995
Telephone: 580.251.3125

Date: December 8, 2005